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EXAMINER

KAO, WEI PO ERIC

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/529,620	Applicant(s) YURUGI ET AL.	
	Examiner WEI-PO KAO	Art Unit 2464	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,6,8-13 and 15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,6,8-13 and 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed on 11/19/2009 have been fully considered but they are not persuasive.

In response to the remark on pages 13 and 14:

In response to the entire content of the remarks, in particular that Rautiola fails to teach exchanging control signals to give a change-over instruction because "... the information message of Rautiola can not confirm proper wired connection of the mobile station 10 to terminal device 40 ...," the examiner respectfully disagrees. Rautiola disclose the following specifically in column 10 lines 44-65 (along with figure 3B):

If the connection between mobile terminal 10 and terminal device 40 is established using intelligent charger 140, the processor 45 (executing the application software 144) of terminal device 40 is monitoring the establishment of the connection. The processor 45 checks periodically whether mobile station 10 has been installed to intelligent charger 140 or not. Alternatively the detecting of the establishment of the connection can be carried out by mobile station 10. In both alternatives this can easily be done e.g. by monitoring the voltage of a pin of a connector as was described above in relation to the embodiment without a separate connection device 140. **After the connection has been established, mobile station 10 sends an information message to terminal device 40, in which it informs about the connection to intelligent charger 140. The terminal device 40 may acknowledge receipt of this message.** Once connection is established call transfer is performed according to the invention. For

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example, when the terminal device is ready it sends via the intelligent charger 140 a call transferring order to mobile station 10, and the mobile station 10 performs the call transfer via the mobile network and sends a confirmation message to terminal device 40 on completion.

The information message, according to the above teaching, clearly confirms the status of a wired connection. So, when combined with Moriyama's system, one device is able to confirm the status of a wired connection to another device, then further give change-over instruction to the another device by using the information message (or control signal). Therefore, the examiner respectfully asserts that the rejection by Moriyama and Rautiola remains.

Claim Rejection - 35 USC § 103

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 1, 4, 6, 8, 9, 10, 11, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moriyama et al, U.S. Publication No. 2004/0198430 (hereinafter Moriyama) in view of Rautiola et al, U.S. Patent No. 5991639 (hereinafter Rautiola).

Regarding Claim 1, Moriyama teaches that **a wireless communication system** (see Abstract, Figure 2, [0002] [0011-0013] [0071]), **comprising a first wireless communication unit** (see Figure 3, [0072-0073] e.g. the processing apparatus) **including first wireless communication means configured to perform wireless data communication** (see Figure 3 Element 16 and 30, [0076-0077] i.e. the wireless communication device 16 transmits data over the wireless connection path 30), **first wired communication means configured to perform, using a wired connection, a wired data communication with no wireless data communication** (see Figure 3 Elements 15 and 20, [0075] [0077] i.e. the wired communication device 15 transmit data over the wired connection path 20), **the wired data communication being for transmitting information that is necessary when establishing a wireless link for performing the wireless data communication, before establishing the wireless link** (see Figure 8, [0018] [0088-0092] i.e. the wired communication device 15 transmits the data required to establish the wireless communication with the display device along the wired connection path before the communication by the wireless connection path 30 is established) **and first change-over means configured to change over whether the wireless data communication should be performed using the first wireless communication means or the wired data communication should be performed using the first wired communication means** (see Figures 6, 7 and 9, [0074] [0079] [0084] [0086] [0093] i.e. as indicated by the paragraphs [0074] and [0079] the processing device

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10 may include a detachment detector to determine whether a wired connection is still on and invokes the change-over mean/procedures as shown in figures 6, 7 and 9 to shift to the wireless connection); **and a second wireless communication unit** (see Figures 4 and 5, [0078] [0080] e.g. the cradle and/or the display device) **including second wireless communication means configured to perform the wireless data communication with the first wireless communication means** (see Figure 5 Elements 30 and 53, [0081] i.e. the wireless communication device 53 receives data from the wireless communication device 16 in the processing apparatus over the wireless connecting path 30), **second wired communication means configured to perform, using the wired connection, a wired data communication with no wireless data communication** (see Figure 5 Elements 20 and 52, [0081] i.e. the wired communication device 52 receives data from the wired communication device 15 in the processing apparatus over the wired connection path 20), **the wired data communication being for receiving the transmitted information, with the first wired communication means, before establishing the wireless link** (see Figure 8, [0022] [0088-0092] i.e. the wired communication device 52 receives the data required to establish the wireless communication with the processing apparatus along the wireless connection path 20 before the communication by the wireless connection path 30 is established), **and second change-over means configured to change over whether the wireless data communication should be performed using the second wireless communication means or the wired data communication should be performed using the second wired communication means** (see Figures 13, 14 and 15, [0074] [0082] [0105] [0106] [0109] i.e. as indicated by the paragraphs [0074] and [0082] the detachment detector in the display device 50 determines whether a wired connection is still on

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and invokes the change-over mean/procedures as shown in figures 13, 14 and 15 to shift to the wireless connection); **wherein the first wireless communication unit further includes first wired connection detecting means configured to detect whether or not the wired connection is being performed between the first wired communication means and the second wired communication means; when the first wired connection detecting means detects that the wired connection is being performed, the first change-over means changes over so that the wired data communication is performed, and using the wired connection detected by the first detecting means, gives a change-over instruction to the second change-over means to change over so that the wired data communication is performed; the second change-over means changes over, based on the change-over instruction given by the first change-over means, so that the wired data communication is performed** (see Figures 6, 7, 9, 13, 14 and 15, [0074] [0079] [0082] [0084] [0086] [0093] [0105] [0106] [0109] i.e. according to paragraphs [0079] (and [0082]) in Moriyama's disclosure, it states that "... the CPU 11 of the processing apparatus 10 need only periodically exchange information with the display device 50, via the wired data transfer line 21, to determine whether the wired image transfer line 22 is connected ..."; in other words, the processing apparatus including the CPU 11, the detector 42, display device control software/connection mode switching process and etc., which acts a first change-over means to make the shifting, exchanges (meaning sending and receiving) information regarding the connectivity of the wired communication line, between the display device including connector 51, connection mode switching process and etc., which also acts as a second change-over means). However, Moriyama does not teach that **wherein when the wired connection is being performed, control signals can be exchanged between the first change-**

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over means and the second change-over means; using the control signals to give a change-over instruction to the second change-over means. Rautiola from the same field of endeavor teach that **wherein when the wired connection is being performed, control signals can be exchanged between the first change-over means and the second change-over means; using the control signals to give a change-over instruction to the second change-over means** (see Abstract, Figures 2, 3A, 3B and 5, Column 3 Lines 15-39, Column 5 Lines 1-18, Column 8 Lines 22-67, Column 10 Lines 44-65 e.g. figures 3A-3B, column 8 lines 42-67, column 10 lines 50-59; when a connection, such as a wired connection, has been established between a mobile station and a terminal device, the mobile station send an information message to terminal device to inform the state of the connection). At the time of the invention, it would have been obvious to a person ordinary skill in the art to implement the connection confirmation mechanism between two devices from Rautiola's disclosure to Moriyama's invention, specifically the host and display. The motivation would have been that it is desired to ensure the connectivity between the two devices and further make the system robust.

Regarding Claim 4, Moriyama et al teach that **a wireless communication unit** (see Abstract, Figure 3, [0072-0073] e.g. the processing apparatus) **comprising: first wireless communication means configured to perform wireless data communication** (see Figure 3 Element 16 and 30, [0076-0077] i.e. the wireless communication device 16 transmits data over the wireless connection path 30), **first wired communication means configured to perform, using a wired connection, a wired data communication with no wireless data communication** (see Figure 3 Elements 15 and 20, [0075] [0077] i.e. the wired communication device 15 transmit data over the

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wired connection path 20), **the wired data communication being for transmitting information that is necessary when establishing a wireless link for performing the wireless data communication, before establishing the wireless link** (see Figure 8, [0018] [0088-0092] i.e. the wired communication device 15 transmits the data required to establish the wireless communication with the display device along the wired connection path before the communication by the wireless connection path 30 is established) **and first change-over means configured to change over whether the wireless data communication should be performed using the first wireless communication means or the wired data communication should be performed using the first wired communication means** (see Figures 6, 7 and 9, [0074] [0079] [0084] [0086] [0093] i.e. as indicated by the paragraphs [0074] and [0079] the processing device 10 may include a detachment detector to determine whether a wired connection is still on and invokes the change-over mean/procedures as shown in figures 6, 7 and 9 to shift to the wireless connection), **and first wired connection detecting means configured to detect whether or not the wired connection is being performed between the first wired communication means and second wired communication means configured to perform the wired data communication with the first wired communication means using the wired connection, wherein, when the first wired connection detecting means detects the wired connection is being performed, the first change-over means changes over so that the wired data communication is performed, and using the wired connection detected by the first wired connection detecting means, gives a change-over instruction to second change-over means configured to change over whether the wireless data communication should be performed using second wireless communication means configured to perform the wireless data communication with the**

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first wireless communication means or the wired data communication should be performed using the second wired communication means, to change over so that the wired data communication is performed (see Figures 6, 7, 9, 13, 14 and 15, [0074] [0079] [0082] [0084] [0086] [0093] [0105] [0106] [0109] i.e. according to paragraphs [0079] (and [0082]) in Moriyama's disclosure, it states that "... the CPU 11 of the processing apparatus 10 need only periodically exchange information with the display device 50, via the wired data transfer line 21, to determine whether the wired image transfer line 22 is connected ..."; in other words, the processing apparatus including the CPU 11, the detector 42, display device control software/connection mode switching process and etc., which acts a first change-over means to make the shifting, exchanges (meaning sending and receiving) information regarding the connectivity of the wired communication line, between the display device including connector 51, connection mode switching process and etc., which also acts as a second change-over means). However, Moriyama does not teach that **wherein when the wired connection is being performed, control signals can be exchanged between the first change-over means and the second change-over means; using the control signals to give a change-over instruction to the second change-over means.** Rautiola from the same field of endeavor teach that **wherein when the wired connection is being performed, control signals can be exchanged between the first change-over means and the second change-over means; using the control signals to give a change-over instruction to the second change-over means** (see Abstract, Figures 2, 3A, 3B and 5, Column 3 Lines 15-39, Column 5 Lines 1-18, Column 8 Lines 22-67, Column 10 Lines 44-65 e.g. figures 3A-3B, column 8 lines 42-67, column 9 lines 49-67, column 10 lines 50-59; when a connection, such as a wired connection, has been established between a mobile

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station and a terminal device, the mobile station send an information message to terminal device to inform the state of the connection). At the time of the invention, it would have been obvious to a person ordinary skill in the art to implement the connection confirmation mechanism between two devices from Rautiola's disclosure to Moriyama's invention, specifically the host and display. The motivation would have been that it is desired to ensure the connectivity between the two devices and further make the system robust.

Regarding Claim 6, Moriyama et al teach that **a wireless communication unit** (see Abstract, Figures 4 and 5, [0078] [0080] e.g. the cradle and/or the display device) **comprising: second wireless communication means configured to perform with first wireless communication means configured to perform wireless data communication, the wireless data communication** (see Figure 5 Elements 30 and 53, [0081] i.e. the wireless communication device 53 receives data from the wireless communication device 16 in the processing apparatus over the wireless connecting path 30), **second wired communication means configured to perform, using a wired connection, a wired data communication with no wireless data communication** (see Figure 5 Elements 20 and 52, [0081] i.e. the wired communication device 52 receives data from the wired communication device 15 in the processing apparatus over the wired connection path 20), **the wired data communication being for receiving information that is necessary when establishing a wireless link for performing the wireless data communication and has been transmitted by a first wired communication means configured to perform the wired data communication to establish the wireless link using the wired connection, with the first wired communication means, before establishing the**

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wireless link (see Figure 8, [0022] [0088-0092] i.e. the wired communication device 52 receives the data required to establish the wireless communication with the processing apparatus along the wireless connection path 20 before the communication by the wireless connection path 30 is established), **and second change-over means configured to change over whether the wireless data communication should be performed using the second wireless communication means or the wired data communication should be performed using the second wired communication means** (see Figures 13, 14 and 15, [0074] [0082] [0105] [0106] [0109] i.e. as indicated by the paragraphs [0074] and [0082] the detachment detector in the display device 50 determines whether a wired connection is still on and invokes the change-over mean/procedures as shown in figures 13, 14 and 15 to shift to the wireless connection), **wherein, when first wired connection detecting means, which is configured to detect whether or not the wired connection is being performed between the first wired communication means and the second wired communication means, detects that the wired connection is being performed, first change-over means, which is configured to change changes over whether the wireless data communication should be performed using the first wireless communication means or the wired data communication should be performed using the first wired communication means, changes over so that the wired data communication is performed using the first wired communication means, and using the detected wired connection, gives a change-over instruction to the second change-over means to change over so that the wired data communication is performed, the second change-over means changes over, based on the change-over instruction given by the first change-over means, so that the wired data communication is performed** (see Figures 6, 7, 9, 13, 14 and 15, [0074] [0079] [0082] [0084]

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[0086] [0093] [0105] [0106] [0109] i.e. according to paragraphs [0079] (and [0082]) in Moriyama's disclosure, it states that "... the CPU 11 of the processing apparatus 10 need only periodically exchange information with the display device 50, via the wired data transfer line 21, to determine whether the wired image transfer line 22 is connected ..."; in other words, the processing apparatus including the CPU 11, the detector 42, display device control software/connection mode switching process and etc., which acts a first change-over means to make the shifting, exchanges (meaning sending and receiving) information regarding the connectivity of the wired communication line, between the display device including connector 51, connection mode switching process and etc., which also acts as a second change-over means). However, Moriyama does not teach that **wherein when the wired connection is being performed, control signals can be exchanged between the first change-over means and the second change-over means; using the control signals to give a change-over instruction to the second change-over means.** Rautiola from the same field of endeavor teach that **wherein when the wired connection is being performed, control signals can be exchanged between the first change-over means and the second change-over means; using the control signals to give a change-over instruction to the second change-over means** (see Abstract, Figures 2, 3A, 3B and 5, Column 3 Lines 15-39, Column 5 Lines 1-18, Column 8 Lines 22-67, Column 10 Lines 44-65 e.g. figures 3A-3B, column 8 lines 42-67, column 9 lines 49-67, column 10 lines 50-59; when a connection, such as a wired connection, has been established between a mobile station and a terminal device, the mobile station send an information message to terminal device to inform the state of the connection). At the time of the invention, it would have been obvious to a person ordinary skill in the art to implement the connection confirmation mechanism

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between two devices from Rautiola's disclosure to Moriyama's invention, specifically the host and display. The motivation would have been that it is desired to ensure the connectivity between the two devices and further make the system robust.

Regarding Claim 8, it is a method claim corresponding to the system claim 1, and therefore rejected under the same reason set forth in the same section of claim 1 in this paragraph.

Regarding Claim 9, it is a method claim corresponding to the apparatus claim 4, and therefore rejected under the same reason set forth in the same section of claim 4 in this paragraph.

Regarding Claim 10, it is a method claim corresponding to the apparatus claim 6, and therefore rejected under the same reason set forth in the same section of claim 6 in this paragraph.

Regarding Claim 11, it is a computer readable medium claim corresponding to the method claim 8, and therefore rejected under the same reason set forth in the same section of claim 8 in this paragraph.

Regarding Claim 12, it is a computer readable medium claim corresponding to the method claim 9, and therefore rejected under the same reason set forth in the same section of claim 9 in this paragraph.

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Regarding Claim 13, it is a computer readable medium claim corresponding to the method claim 10, and therefore rejected under the same reason set forth in the same section of claim 10 in this paragraph.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moriyama et al, U.S. Publication No. 2004/0198430 (hereinafter Moriyama) in view of Rautiola et al, U.S. Patent No. 5991639 (hereinafter Rautiola) as applied to claim 1 above, and further in view of Fong, U.S. Publication No. 2005/0249169.

Regarding Claim 3, Moriyama and Rautiola teach all the limitations except that **the wireless communication system, wherein the first wireless communication unit further includes a first signal level adjusting means configured to adjust, when the first wired connection detecting means detects that the wired connection is being performed, a signal level so that the wired data communication is performed using a signal level smaller than the signal level necessary for the wireless data communication.** Fong from the same field of endeavor teach that **the wireless communication system, wherein the first wireless communication unit further includes a first signal level adjusting means configured to adjust, when the first wired connection detecting means detects that the wired connection is being performed, a signal level so that the wired data communication is performed using a signal level smaller than the signal level necessary for the wireless data communication** (see Abstract, [0040] i.e. a wired communication link is generally more stable than a wireless link, thus for a system, which is able to select either one for communication and adjust signal strength,

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it is obvious to adjust signal strength so that wireless has greater value). At the time of the invention, it would have been obvious to a person ordinary skill in the art to implement the signal level adjustment mechanism to a system with communication medium selection mechanism. The rationale would have been that with signal strength adjustment mechanism, the communication medium selection mechanism can yield more efficient and optimal medium communication medium for communication.

7. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moriyama et al, U.S. Publication No. 2004/0198430 (hereinafter Moriyama) in view of Lempio et al, U.S. Publication No. 2003/0207683 (hereinafter Lempio) and Rautiola et al, U.S. Patent No. 5991639 (hereinafter Rautiola).

Regarding Claim 15, Moriyama et al teach that **a wireless communication unit** (see Abstract, Figure 3, [0072-0073] e.g. the processing apparatus) **comprising: first wireless communication means configured to perform wireless data communication** (see Figure 3 Element 16 and 30, [0076-0077] i.e. the wireless communication device 16 transmits data over the wireless connection path 30); **first wired communication means configured to perform, using a wired connection, a wired data communication with no wireless data communication** (see Figure 3 Elements 15 and 20, [0075] [0077] i.e. the wired communication device 15 transmit data over the wired connection path 20), **the wired data communication being for transmitting or receiving information that is necessary when establishing a wireless link for performing the**

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wireless data communication, before establishing the wireless link (see Figure 8, [0018] [0022] [0088-0092] i.e. the wired communication device 15 transmits the data required to establish the wireless communication with the display device along the wired connection path before the communication by the wireless connection path 30 is established), **first change-over means configured to change over whether the wireless data communication should be performed using the first wireless communication means or the wired data communication should be performed using the first wired communication means** (see Figures 6, 7 and 9, [0074] [0079] [0082] [0084] [0086] [0093]); and **first wired connection detecting means configured to detect whether or not the wired connection is being performed between the first wired communication means and second wired communication means configured to perform the wired data communication with the first wired communication means using the wired connection** (see Figures 3-5, [0079] [0082] i.e. the detachment detector is able to determine if the wired connection between the processing apparatus and the display device is still on), wherein, (1) when the first wired connection detecting means detects the wired connection is being performed, the first change-over means changes over so that the wired data communication is performed, and using the wired connection detected by the first wired connection detecting means, gives a change-over instruction to second change-over means, which is configured to change changes over whether the wireless data communication should be performed using second wireless communication means configured to perform that performs the wireless data communication with the first wireless communication means or the wired data communication should be performed using the second wired communication means, to change over so that the wired data

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communication is performed (see Figures 6, 7, 9, 13, 14 and 15, [0074] [0079] [0082] [0084] [0086] [0093] [0105] [0106] [0109] i.e. according to paragraphs [0079] (and [0082]) in Moriyama's disclosure, it states that "... the CPU 11 of the processing apparatus 10 need only periodically exchange information with the display device 50, via the wired data transfer line 21, to determine whether the wired image transfer line 22 is connected ..."; in other words, the processing apparatus including the CPU 11, the detector 42, display device control software/connection mode switching process and etc., which acts a first change-over means to make the shifting, exchanges (meaning sending and receiving) information regarding the connectivity of the wired communication line, between the display device including connector 51, connection mode switching process and etc., which also acts as a second change-over means). However, Moriyama et al do not teach that **(2) when third wired connection detecting means, which is configured to detect whether or not the wired connection is being performed between the first wired communication means and third wired communication means configured to perform wired data communication with the first wired communication means using a wired connection, detects that the wired connection is being performed, third change over means, which is configured to change changes over whether the wireless data communication should be performed using third wireless communication means configured to perform the wireless data communication with the first wireless communication means or the wired data communication should be performed using the third wired communication means, changes over so that the wired data communication is performed using the third wired communication means, and using the detected wired connection, gives a change-over instruction to the first change- over means, to change over**

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so that the wired data communication is performed, and the first change-over means changes over, based on the change-over instruction given by the third change over means, so that the wired data communication is performed. Lempio from the same field of endeavor teaches that (2) when third wired connection detecting means, which is configured to detect whether or not the wired connection is being performed between the first wired communication means and third wired communication means configured to perform wired data communication with the first wired communication means using a wired connection, detects that the wired connection is being performed, third change over means, which is configured to change changes over whether the wireless data communication should be performed using third wireless communication means configured to perform the wireless data communication with the first wireless communication means or the wired data communication should be performed using the third wired communication means, changes over so that the wired data communication is performed using the third wired communication means, and using the detected wired connection, gives a change-over instruction to the first change-over means, to change over so that the wired data communication is performed, and the first change-over means changes over, based on the change-over instruction given by the third change over means, so that the wired data communication is performed (see Abstract, Figures 1, 3 and 4, [0029-0030] [0032] [0035] i.e. the invention of Lempio suggests that the processing apparatus, which utilize the WLAN technology such as 802.11, is able to connect to more than one display devices). At the time of the invention, it would have been obvious to a person ordinary skill in the art to implement the capability of the access point of the Lempio's invention with the processing apparatus of

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Moriyama to accommodate multiple display devices. The rationale would have been that it is desired to allow the accommodation of multiple display devices to fully utilize the service provided by the processing apparatus.

Still regarding Claim 15, Moriyama and Lempio teach all the limitations in claim 15 except that **wherein when the wired connection is being performed, control signals can be exchanged between the first change-over means and the second change-over means; using the control signals to give a change-over instruction to the second change-over means.** Rautiola from the same field of endeavor teach that **wherein when the wired connection is being performed, control signals can be exchanged between the first change-over means and the second change-over means; using the control signals to give a change-over instruction to the second change-over means** (see Abstract, Figures 2, 3A, 3B and 5, Column 3 Lines 15-39, Column 5 Lines 1-18, Column 8 Lines 22-67, Column 10 Lines 44-65 e.g. figures 3A-3B, column 8 lines 42-67, column 9 lines 49-67, column 10 lines 50-59; when a connection, such as a wired connection, has been established between a mobile station and a terminal device, the mobile station send an information message to terminal device to inform the state of the connection). At the time of the invention, it would have been obvious to a person ordinary skill in the art to implement the connection confirmation mechanism between two devices from Rautiola's disclosure to Moriyama's invention, specifically the host and display. The motivation would have been that it is desired to ensure the connectivity between the two device and further make the system robust.

Conclusion

8. Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to WEI-PO KAO whose telephone number is (571)270-3128. The examiner can normally be reached on Monday through Friday, 8:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571)272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Ricky Ngo/

Supervisory Patent Examiner, Art Unit

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/Wei-po Kao/

Examiner, Art Unit 2464